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- (d) SC03 testing procedures. The test procedures to be followed for conducting the SC03 test are prescribed in §§ 86.160 and 86.161 of this chapter, as applicable.
- (e) Cold temperature FTP procedures. The test procedures to be followed for conducting the cold temperature FTP test are generally prescribed in subpart C of part 86 of this chapter, as applicable. For the purpose of fuel economy labeling, diesel vehicles are subject to cold temperature FTP testing, but are not required to measure particulate matter, as described in §86.210 of this chapter.
- (f) Special test procedures. The Administrator may prescribe test procedures, other than those set forth in this subpart B, for any vehicle which is not susceptible to satisfactory testing and/ or testing results by the procedures set forth in this part. For example, special test procedures may be used for advanced technology vehicles, including, but not limited to fuel cell vehicles, hybrid electric vehicles using hydraulic energy storage, and vehicles equipped with hydrogen internal combustion engines. Additionally, the Administrator may conduct fuel economy and carbon-related exhaust emission testing using the special test procedures approved for a specific vehicle.

[76 FR 39531, July 6, 2011]

## § 600.112-08 Exhaust sample analysis.

The exhaust sample analysis must be performed according to §86.140, or §86.240 of this chapter, as applicable.

[71 FR 77935, Dec. 27, 2006]

## § 600.113-08 Fuel economy calculations for FTP, HFET, US06, SC03 and cold temperature FTP tests.

The Administrator will use the calculation procedure set forth in this paragraph for all official EPA testing of vehicles fueled with gasoline, diesel, alcohol-based or natural gas fuel. The calculations of the weighted fuel economy values require input of the weighted grams/mile values for total hydrocarbons (HC), carbon monoxide (CO), and carbon dioxide (CO<sub>2</sub>); and, additionally for methanol-fueled automobiles, methanol (CH<sub>3</sub>OH) and formaldehyde (HCHO); and additionally for

natural gas-fueled vehicles non-methane hydrocarbons (NMHC) and methane (CH<sub>4</sub>) for the FTP, HFET, US06, SC03 and cold temperature FTP tests. Additionally, the specific gravity, carbon weight fraction and net heating value of the test fuel must be determined. The FTP, HFET, US06, SC03 and cold temperature FTP fuel economy values shall be calculated as specified in this section. An example appears in appendix II of this part.

- (a) Calculate the FTP fuel economy.
- (1) Calculate the weighted grams/mile values for the FTP test for HC, CO and CO<sub>2</sub>; and, additionally for methanol-fueled automobiles, CH<sub>3</sub>OH and HCHO; and additionally for natural gas-fueled automobiles NMHC and CH<sub>4</sub> as specified in §86.144 of this chapter. Measure and record the test fuel's properties as specified in paragraph (f) of this section.
- (2) Calculate separately the grams/mile values for the cold transient phase, stabilized phase and hot transient phase of the FTP test. For vehicles with more than one source of propulsion energy, one of which is a rechargeable energy storage system, or vehicles with special features that the Administrator determines may have a rechargeable energy source, whose charge can vary during the test, calculate separately the grams/mile values for the cold transient phase, stabilized phase, hot transient phase and hot stabilized phase of the FTP test.
- (b) Calculate the HFET fuel economy.
- (1) Calculate the mass values for the highway fuel economy test for HC, CO and CO<sub>2</sub>, and where applicable CH<sub>3</sub>OH, HCHO, NMHC and CH<sub>4</sub> as specified in  $\S 86.144(b)$  of this chapter. Measure and record the test fuel's properties as specified in paragraph (f) of this section.
- (2) Calculate the grams/mile values for the highway fuel economy test for HC, CO and  $\mathrm{CO}_2$ , and where applicable  $\mathrm{CH}_3\mathrm{OH}$ , HCHO, NMHC and  $\mathrm{CH}_4$  by dividing the mass values obtained in paragraph (b)(1) of this section, by the actual distance traveled, measured in miles, as specified in §86.135(h) of this chapter.
- (c) Calculate the cold temperature FTP fuel economy.